

REMARKS

Claims 1-10, all the claims pending in the application, stand rejected on prior art grounds.

Claims 1, 6, 7, and 10 are also rejected under 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 1, 6, 7, and 10 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. In particular, the Examiner asserts that the recitation “approximately evenly” renders the claims indefinite because “approximately” is a relative term.

Independent claims 1, 6, 7, and 10 are amended to recite that the plurality of user equipments are split substantially evenly. Applicants submit that these claims comply with the requirements of 35 U.S.C. § 112, second paragraph. For example, referring to MPEP § 2173.05 (b), the court held that the limitation “which produces substantially equal E and H plane illumination patterns” was definite because one of ordinary skill in the art would know what was meant by “substantially equal.” *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988). Accordingly, Applicants request withdrawal of the rejections.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner has rejected claims 1, 2, 6-8, and 10¹ under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hedberg in view of Hiramatsu and U.S. Patent Publication No. 2003/0210668 to Malladi et al. (hereinafter “Malladi”) and further in view of U.S. Patent No. 6,763,237 to Katz (hereinafter “Katz”). Applicants respectfully traverse the rejections at least for the following reasons.

¹ Applicants note that page 3 of the Office Action indicates that claim 11 is rejected. However, claim 11 was canceled without prejudice or disclaimer in the Amendment filed February 6, 2008.

The Examiner asserts that the combination of Hedberg, Hiramatsu, and Malladi teaches many features of independent claims 1, 6, 7, and 10. The Examiner acknowledges that the combination of Hedberg, Hiramatsu, and Malladi does not teach splitting the plurality of user equipments approximately evenly into a plurality of groups and further assigning an antenna to approximately evenly grouped users accordingly (See page 5 of the Office Action). The Examiner relies on Katz to allegedly cure these deficiencies. In particular, the Examiner asserts that Katz discloses a base station which transmits to a plurality of user equipments in which each of two antennas are assigned to two user groups which are grouped evenly. The Examiner contends that it would have been obvious to one of ordinary skill in the art to further modify the asserted method of the combination of Hedberg, Hiramatsu, and Malladi to assign each of the antennas to user groups which are evenly grouped for load balancing and for substantially equal resource utilization. Applicants respectfully disagree.

Katz discloses a transceiver station 10 comprising a first antenna element 1 supported by a first power amplifier PA1 and a second antenna element 2 supported by a second power amplifier PA2 (See Figure 3). Downlink communication 14 is transmitted as downlink communication stream 16 by alternate use of the two antenna elements 1 and 2 (col. 5, lines 23-27). Specifically, antenna selection is performed such that the instantaneous load will be switched alternately between a first condition in which the load on the first power amplifier PA1 equals KP and the load on the second amplifier PA2 is zero and a second condition in which the load on the first power amplifier PA1 equals zero and the load on the second amplifier PA2 is KP (col. 6, lines 9-14). Accordingly, load balancing is achieved.

Initially, Applicants note that Katz's method relates to the transmission of signals by a plurality of users. Accordingly, Applicants submit that Katz's method does not relate to the

splitting of a plurality of user equipments and sending first and second signals to the split plurality of user equipments.

Moreover, Katz's method clearly relies on the alternate use of antenna elements 1 and 2. The Examiner cites col. 6, lines 46-50 which discloses that, during a particular burst, half of the users are using the first power amplifier PA1 and first antenna 1 while the other half are using second power amplifier PA1 and second antenna 2. However, this portion further discloses that, in a subsequent burst, each user is switched to the opposite antenna. Accordingly, contrary to the Examiner's assertions, each group of user equipments is not assigned a particular antenna. Instead, each group of users makes use of each of the first and second antennas 1 and 2 alternately. Accordingly, Applicants submit that Katz does not teach or suggest splitting the plurality of user equipments approximately evenly into a plurality of groups, and assigning an antenna of a set of antennas to each of the plurality of groups, as recited by independent claims 1, 6, 7, and 10, in some variation. As acknowledged by the Examiner, the combination of Hedberg, Hiramatsu, and Malladi does not cure this deficiency.

For all of the foregoing reasons, Applicants submit that independent claims 1, 6, 7, and 10 are not rendered unpatentable by the combination of Hedberg, Hiramatsu, Malladi, and Katz. Applicants also submit that claims 2 and 8 are patentable at least by virtue of their dependency on claims 1 and 7, respectively.

The Examiner has rejected claims 3-5 and 9 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hedberg in view of Hiramatsu, Malladi, and Katz, and further in view of U.S. Patent Publication No. 2002/0145988 to Dahlman et al. (hereinafter "Dahlman"). Because claims 3-5 and 9 are dependent on one of claims 1 and 7, and because

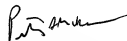
Dahlman does not cure the deficiencies of Hedberg, Hiramatsu, and Malladi discussed above,
Applicants submit that the claims are patentable at least by virtue of their dependency.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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